

# CLAIMS

1           1.     A method of transmitting data across a firewall, the method  
2     comprising:  
3           receiving a request to transmit data to a destination;  
4           searching for a firewall associated with the destination, the firewall being  
5     configured to prohibit communication to the destination via a primary communication  
6     protocol and allow communication to the destination via a secondary communication  
7     protocol;  
8           if the firewall is detected,  
9           automatically configuring the data for communication with the  
10    secondary communication protocol; and  
11           transmitting the data to the destination by utilizing the secondary  
12    communication protocol.

1           2.     The method of claim 1, further comprising:  
2           transmitting the data to the destination by utilizing the primary communication  
3     protocol if the firewall is not detected.

1           3.     The method of claim 1, wherein the request to transmit the data to the  
2     destination comprises a primary address of the destination related to the primary  
3     communication protocol and a secondary address of the destination related to the  
4     secondary communication protocol.

1           4.       The method of claim 3, wherein the desired location is a printer and a  
2       print job comprises the data that is requested to be transmitted.

1           5.       The method of claim 3, wherein searching for the firewall comprises  
2       pinging the primary address of the desired location.

1           6.       The method of claim 2, wherein searching for the firewall comprises:  
2       scanning the desired location to find an open port, the open port being related  
3       to the primary communication protocol; and  
4       detecting the firewall, if present, upon not finding the open port.

1           7.       The method of claim 2, wherein searching for the firewall comprises:  
2       attempting to transmit the data via the primary communication protocol, such  
3       that a failure to successfully transmit the data via the primary communication protocol  
4       would signify the firewall is present.

1           8.       The method of claim 2, wherein the primary communication protocol  
2       is any one or combination of the following: the Hyper-Text Transfer Protocol (HTTP),  
3       the Transfer Control Protocol (TCP), the Internet Protocol (IP), the File Transfer  
4       Protocol (FTP), and the User Datagram Protocol (UDP).

1           9.     The method of claim 3, wherein the secondary communication protocol  
2     is an electronic mail (email) protocol and the secondary address is an email address;  
3     and further wherein automatically configuring the data for communication comprises:  
4           generating an email;  
5           addressing the email to the secondary address; and  
6           populating the email with pertinent information that correlates to the data.

1           10.    The method of claim 9, wherein automatically configuring the data for  
2     communication further comprises:  
3           placing the data in the email.

1           11.    The method of claim 9, wherein automatically configuring the data for  
2     communication further comprises:  
3           attaching the data to the email, the data being stored in a file.

1           12.    The method of claim 9, wherein the information that is populated in the  
2     email comprises a reference to a remote location where the data is stored.

1           13.    The method of claim 3, wherein the secondary communication protocol  
2     is the File Transfer Protocol (FTP) and the secondary address is an FTP address.

1           14.     A system for rerouting the transmission of data to avoid a firewall, the  
2     system comprising:

3           a transmission device configured to search for a firewall protecting a  
4     destination, the firewall being configured to prohibit communication to the destination  
5     via a primary communication protocol and allow communication to the destination via  
6     a secondary communication protocol, the transmission device is further configured to,  
7     upon detection of the firewall, automatically configure the data for communication  
8     over the secondary communication protocol and transmit the data by utilizing the  
9     secondary communication protocol.

1           15.     The system of claim 14, wherein the transmission device is further  
2     configured to, upon not detecting the firewall, transmit the data to the destination by  
3     utilizing the primary communication protocol.

1           16.     The system of claim 15, wherein the transmission device is further  
2     configured to receive a request to transmit the data to the destination, wherein the  
3     request comprises at least one of the following: a primary address and a secondary  
4     address of the destination, the primary address being related to the primary  
5     communication protocol and the secondary address being related to the secondary  
6     communication protocol.

1           17.     The system of claim 15, wherein the transmission device is further  
2     configured to search for the firewall by scanning the destination to find an open port,  
3     the open port being related to the primary communication protocol, upon not finding  
4     the open port, the firewall is detected.

1           18.    The system of claim 16, wherein the transmission device is further  
2 configured to search for the firewall by pinging the primary address of the destination.

1           19.    The system of claim 16, wherein the transmission device is further  
2 configured to search for the firewall by attempting to transmit the data via the primary  
3 communication protocol, such that a failure to successfully transmit the data via the  
4 primary communication protocol would signify the firewall is present.

1           20.    The system of claim 16, wherein the secondary communication  
2 protocol is an electronic mail (email) protocol.

1           21.    The system of claim 20, wherein the secondary address is an email  
2 address and wherein the transmission device is further configured to automatically  
3 configure communication by:

4           generating an email;  
5           addressing the email to the secondary address; and  
6           populating the email with pertinent information that correlates to the data.

1           22.    The system of claim 21, wherein the transmission device is further  
2 configured to automatically configure the data for communication by placing the data  
3 in the email.

1           23.    The system of claim 21, wherein the transmission device is further  
2   configured to automatically configure the data for communication by attaching the  
3   data to the email, the data being stored in a file.

1           24.    The system of claim 21, wherein the information that is populated in  
2   the email comprises a reference to a remote location where the data is stored.

1           25.    The system of claim 16, wherein the secondary communication  
2   protocol is the File Transfer Protocol (FTP) and wherein the secondary address is an  
3   FTP address.

1           26.    The system of claim 15, wherein the primary communication protocol  
2   is any one or combination of the following: the Hyper-Text Transfer Protocol (HTTP),  
3   the Transfer Control Protocol (TCP), the Internet Protocol (IP), the File Transfer  
4   Protocol (FTP), and the User Datagram Protocol (UDP).

1           27.    The system of claim 15, further comprising:  
2           a recipient device configured to be the destination, the recipient device further  
3   configured to communicate with the primary and secondary communication protocol.

1           28.    The system of claim 27, wherein the recipient device is a printer and a  
2   print job comprises the data.

1           29.    A transmission device configured to transmit data to a destination, the  
2 transmission device comprising:

3               means for transmitting the data by utilizing a secondary communication  
4 protocol;

5               means for searching for a firewall, the firewall being configured to prohibit  
6 communication to the destination by a primary communication protocol and allow  
7 communication to the destination via the secondary communication protocol; and

8               means for automatically configuring the data for communication for the  
9 secondary communication protocol upon detecting the firewall.

1           30.    The device of claim 29, further comprising means for transmitting the  
2 data by utilizing the primary communication protocol, wherein upon not detecting the  
3 firewall, the data is transmitted by utilizing the primary communication protocol.

1           31.    The device of claim 30, further comprising means for receiving a  
2 request to transmit the data to the destination.

1           32.    The device of claim 31, wherein the request comprises at least one of  
2 the following: a primary address and a secondary address of the destination, the  
3 primary address being related to the primary communication protocol and the  
4 secondary address being related to the secondary communication protocol.

1           33.    The device of claim 31, wherein the secondary communication  
2 protocol is an electronic mail (email) protocol.

1           34.    The device of claim 32, wherein the secondary address is an email  
2   address and wherein the means for automatically configuring the data for  
3   communication for the secondary communication protocol comprises:

4               means for generating an email;

5               means for addressing the email to the secondary address;

6               means for populating the email with pertinent information that correlates to the  
7   data; and

8               means for populating the email with the data.

1           35.    A data transmission program stored on a computer-readable medium,  
2   the transmission program comprising:

3               logic configured to facilitate the transmission of data by utilizing a secondary  
4   communication protocol;

5               logic configured to search for a firewall; and

6               logic configured to automatically configure communication for the secondary  
7   communication protocol upon detecting the firewall.

1           36.    The program of claim 35, wherein the firewall is configured to prohibit  
2   communication to a recipient device via a primary communication protocol and allow  
3   communication via the secondary communication protocol.

1           37.    The program of claim 36, further comprising logic configured to  
2   facilitate the transmission of the data by utilizing the primary communication  
3   protocol, wherein upon not detecting the firewall, the data is transmitted by utilizing  
4   the primary communication protocol.



1           38.    The program of claim 36, further comprising logic configured to  
2   receive a request to transmit the data to the recipient device, the request comprising of  
3   at least one of the following: a primary address and a secondary address of the  
4   recipient device, the primary address being related to the primary communication  
5   protocol and the secondary address being related to the secondary communication  
6   protocol.

1           39.    The program of claim 38, wherein the secondary address is an  
2   electronic mail (email) address and the secondary communication protocol is an email  
3   protocol; and

4           wherein the logic configured to automatically configure the data for  
5   communication for the secondary communication protocol comprises:

6           logic configured to generate an email;

7           logic configured to address the email to the secondary address;

8           logic configured to populate the email with pertinent information that  
9   correlates to the data; and

10          logic configured to populate the email with the data.

1           40.    The program of claim 38, wherein the secondary communication  
2   protocol is the File Transfer Protocol (FTP) and the secondary address is an FTP  
3   address.

1           41.     The program of claim 36, wherein the primary communication protocol  
2     is any one or combination of the following: the Hyper-Text Transfer Protocol (HTTP),  
3     the Transfer Control Protocol (TCP), the Internet Protocol (IP), the File Transfer  
4     Protocol (FTP), and the User Datagram Protocol (UDP).

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